Extron® Electronics

INTERFACING, SWITCHING AND DISTRIBUTION

Setup Guide

IPL T SF Series

IP Link® Ethernet Control Interfaces

68-1434-01 **Rev. B**
12 08

Precautions

Safety Instructions • English

This symbol is intended to alert the user of important operating and maintenance (servicing) instructions in the literature provided with the equipment.

This symbol is intended to alert the user of the presence of uninsulated dangerous voltage within the product's enclosure that may present a risk of electric shock.

Caution

Read Instructions • Read and understand all safety and operating instructions before using the equipment.

Retain Instructions • The safety instructions should be kept for future reference.

Follow Warnings • Follow all warnings and instructions marked on the equipment or in the user information.

Avoid Attachments • Do not use tools or attachments that are not recommended by the equipment manufacturer because they may be hazardous.

Consignes de Sécurité • Français

Ce symbole sert à avertir l'utilisateur que la documentation fournie avec le matériel contient des instructions importantes concernant l'exploitation et la maintenance (réparation).

Ce symbole sert à avertir l'utilisateur de la présence dans le boîtier de l'appareil de tensions dangereuses non isolées posant des risques d'électrocution.

Attention

Lire les instructions• Prendre connaissance de toutes les consignes de sécurité et d'exploitation avant d'utiliser le matériel.

Conserver les instructions• Ranger les consignes de sécurité afin de pouvoir les consulter à l'avenir.

Respecter les avertissements • Observer tous les avertissements et consignes marqués sur le matériel ou présentés dans la documentation utilisateur.

Eviter les pièces de fixation • Ne pas utiliser de pièces de fixation ni d'outils non recommandés par le fabricant du matériel car cela risquerait de poser certains dangers.

Sicherheitsanleitungen • Deutsch

Dieses Symbol soll dem Benutzer in der im Lieferumfang enthaltenen Dokumentation besonders wichtige Hinweise zur Bedienung und Wartung (Instandhaltung) geben.

Dieses Symbol soll den Benutzer darauf aufmerksam machen, daß im Inneren des Gehäuses dieses Produktes gefährliche Spannungen, die nicht isoliert sind und die einen elektrischen Schock verursachen können, herrschen.

Achtung

Lesen der Anleitungen • Bevor Sie das Gerät zum ersten Mal verwenden, sollten Sie alle Sicherheits-und Bedienungsanleitungen genau durchlesen und verstehen.

Aufbewahren der Anleitungen • Die Hinweise zur elektrischen Sicherheit des Produktes sollten Sie aufbewahren, damit Sie im Bedarfsfall darauf zurückgreifen können.

Befolgen der Warnhinweise • Befolgen Sie alle Warnhinweise und Anleitungen auf dem Gerät oder in der Benutzerdokumentation.

Keine Zusatzgeräte • Verwenden Sie keine Werkzeuge oder Zusatzgeräte, die nicht ausdrücklich vom Hersteller empfohlen wurden, da diese eine Gefahrenquelle darstellen können.

Instrucciones de seguridad • Español

Este símbolo se utiliza para advertir al usuario sobre instrucciones importantes de operación y mantenimiento (o cambio de partes) que se desean destacar en el contenido de la documentación suministrada con los equipos.

Este símbolo se utiliza para advertir al usuario sobre la presencia de elementos con voltaje peligroso sin protección aislante, que puedan encontrarse dentro de la caja o alojamiento del producto, y que puedan representar riesgo de electrocución.

Precaucion

Leer las instrucciones • Leer y analizar todas las instrucciones de operación y seguridad, antes de usar el equipo.

Conservar las instrucciones • Conservar las instrucciones de seguridad para futura consulta.

Obedecer las advertencias • Todas las advertencias e instrucciones marcadas en el equipo o en la documentación del usuario, deben ser obedecidas.

Evitar el uso de accesorios • No usar herramientas o accesorios que no sean especificamente recomendados por el fabricante, ya que podrian implicar riesgos.

Warning

Power sources • This equipment should be operated only from the power source indicated on the product. This equipment is intended to be used with a main power system with a grounded (neutral) conductor. The third (grounding) pin is a safety feature, do not attempt to bypass or disable it.

Power disconnection • To remove power from the equipment safely, remove all power cords from the rear of the equipment, or the desktop power module (if detachable), or from the power source receptacle (wall plug).

Power cord protection • Power cords should be routed so that they are not likely to be stepped on or pinched by items placed upon or against them.

Servicing • Refer all servicing to qualified service personnel. There are no user-serviceable parts inside. To prevent the risk of shock, do not attempt to service this equipment yourself because opening or removing covers may expose you to dangerous voltage or other hazards.

Slots and openings • If the equipment has slots or holes in the enclosure, these are provided to prevent overheating of sensitive components inside. These openings must never be blocked by other objects.

Lithium battery • There is a danger of explosion if battery is incorrectly replaced. Replace it only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Avertissement

Alimentations• Ne faire fonctionner ce matériel qu'avec la source d'alimentation indiquée sur l'appareil. Ce matériel doit être utilisé avec une alimentation principale comportant un fil de terre (neutre). Le troisième contact (de mise à la terre) constitue un dispositif de sécurité : n'essayez pas de la contourner ni de la désactiver.

Déconnexion de l'alimentation• Pour mettre le matériel hors tension sans danger, déconnectez tous les cordons d'alimentation de l'arrière de l'appareil ou du module d'alimentation de bureau (s'il est amovible) ou encore de la prise secteur.

Protection du cordon d'alimentation • Acheminer les cordons d'alimentation de manière à ce que personne ne risque de marcher dessus et à ce qu'ils ne soient pas écrasés ou pincés par des objets.

Réparation-maintenance • Faire exécuter toutes les interventions de réparation-maintenance par un technicien qualifié. Aucun des éléments internes ne peut être réparé par l'utilisateur. Afin d'éviter tout danger d'électrocution, l'utilisateur ne doit pas essayer de procéder lui-même à ces opérations car l'ouverture ou le retrait des couvercles risquent de l'exposer à de hautes tensions et autres dangers.

Fentes et orifices • Si le boîtier de l'appareil comporte des fentes ou des orifices, ceux-ci servent à empêcher les composants internes sensibles de surchauffer. Ces ouvertures ne doivent jamais être bloquées par des objets.

Lithium Batterie • Il a danger d'explosion s'll y a remplacment incorrect de la batterie. Remplacer uniquement avec une batterie du meme type ou d'un ype equivalent recommande par le constructeur. Mettre au reut les batteries usagees conformement aux instructions du fabricant.

Vorsicht

Stromquellen • Dieses Gerät sollte nur über die auf dem Produkt angegebene Stromquelle betrieben werden. Dieses Gerät wurde für eine Verwendung mit einer Hauptstromleitung mit einem geerdeten (neutralen) Leiter konzipiert. Der dritte Kontakt ist für einen Erdanschluß, und stellt eine Sicherheitsfunktion dar. Diese sollte nicht umgangen oder außer Betrieb gesetzt werden.

Stromunterbrechung • Um das Gerät auf sichere Weise vom Netz zu trennen, sollten Sie alle Netzkabel aus der Rückseite des Gerätes, aus der externen Stomversorgung (falls dies möglich ist) oder aus der Wandsteckdose ziehen.

Schutz des Netzkabels • Netzkabel sollten stets so verlegt werden, daß sie nicht im Weg liegen und niemand darauf treten kann oder Objekte darauf- oder unmittelbar dagegengestellt werden können.

Wartung • Alle Wartungsmaßnahmen sollten nur von qualifiziertem Servicepersonal durchgeführt werden. Die internen Komponenten des Gerätes sind wartungsfrei. Zur Vermeidung eines elektrischen Schocks versuchen Sie in keinem Fall, dieses Gerät selbst öffnen, da beim Entfernen der Abdeckungen die Gefahr eines elektrischen Schlags und/oder andere Gefahren bestehen.

Schlitze und Öffnungen • Wenn das Gerät Schlitze oder Löcher im Gehäuse aufweist, dienen diese zur Vermeidung einer Überhitzung der empfindlichen Teile im Inneren. Diese Öffnungen dürfen niemals von anderen Objekten blockiert werden.

Litium-Batterie • Explosionsgefahr, falls die Batterie nicht richtig ersetzt wird. Ersetzen Sie verbrauchte Batterien nur durch den gleichen oder einen vergleichbaren Batterietyp, der auch vom Hersteller empfohlen wird. Entsorgen Sie verbrauchte Batterien bitte gemäß den Herstelleranweisungen.

Advertencia

Alimentación eléctrica • Este equipo debe conectarse únicamente a la fuente/tipo de alimentación eléctrica indicada en el mismo. La alimentación eléctrica de este equipo debe provenir de un sistema de distribución general con conductor neutro a tierra. La tercera pata (puesta a tierra) es una medida de seguridad, no puentearia ni eliminaria.

Desconexión de alimentación eléctrica • Para desconectar con seguridad la acometida de alimentación eléctrica al equipo, desenchufar todos los cables de alimentación en el panel trasero del equipo, o desenchufar el módulo de alimentación (si fuera independiente), o desenchufar el cable del receptáculo de la pared.

Protección del cables de alimentación • Los cables de alimentación eléctrica se deben instalar en lugares donde no sean pisados ni apretados por objetos que se puedan apoyar sobre ellos.

Reparaciones/mantenimiento • Solicitar siempre los servicios técnicos de personal calificado. En el interior no hay partes a las que el usuario deba acceder. Para evitar riesgo de electrocución, no intentar personalmente la reparación/mantenimiento de este equipo, ya que al abrir o extraer las tapas puede quedar expuesto a voltajes peligrosos u otros riesgos.

Ranuras y aberturas • Si el equipo posee ranuras o orificios en su caja/alojamiento, es para evitar el sobrecalientamiento de componentes internos sensibles. Estas aberturas nunca se deben obstruir con otros objetos.

Batería de litio • Existe riesgo de explosión si esta batería se coloca en la posición incorrecta. Cambiar esta batería únicamente con el mismo tipo (o su equivalente) recomendado por el fabricante. Desachar las baterías usadas siguiendo las instrucciones del fabricante.

安全须知 • 中文

这个符号提示用户该设备用户手册中有重要的操作和维护说明。

这个符号警告用户该设备机壳内有暴露的危险电压，有触电危险。

注意

阅读说明书 • 用户使用该设备前必须阅读并理解所有安全和使用说明。

保存说明书 • 用户应保存安全说明书以备将来使用。

遵守警告 • 用户应遵守产品和用户指南上的所有安全和操作说明。

避免追加 • 不要使用该产品厂商没有推荐的工具或追加设备，以避免危险。

警告

电源 • 该设备只能使用产品上标明的电源。 设备必须使用有地线的供电系统供电。 第三条线（地线）是安全设施，不能不用或跳过。

拔掉电源 • 为安全地从设备拔掉电源，请拔掉所有设备后或桌面电源的电源线，或任何接到市电系统的电源线。

电源线保护 • 妥善布线， 避免被踩踏，或重物挤压。

维护 • 所有维修必须由认证的维修人员进行。 设备内部没有用户可以更换的零件。为避免出现触电危险不要自己试图打开设备盖子维修该设备。

通风孔 • 有些设备机壳上有通风槽或孔，它们是用来防止机内敏感元件过热。 不要用任何东西挡住通风孔。

锂电池 • 不正确的更换电池会有爆炸的危险。 必须使用与厂家推荐的相同或相近型号的电池。 按照生产厂的建议处理废弃电池。

声明

所使用电源为 A 级产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对其干扰采取切实可行的措施。

FCC Class A Notice

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. The Class A limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

NOTE *This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to ensure compliance with FCC emissions limits.*

Table of Contents

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Chapter One

Introduction

About this Manual

IPL T SF Series Products

Global Configurator

About this Manual

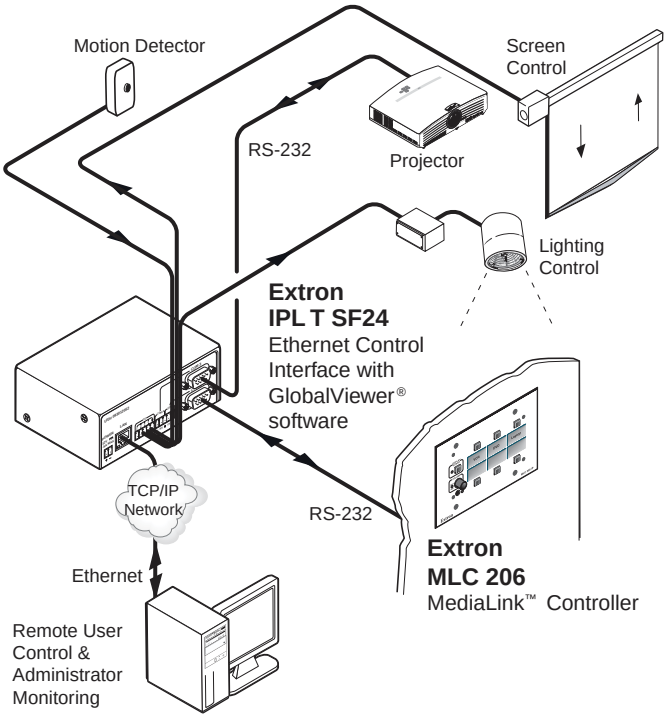
This setup guide describes the

- IPL T SF Series products
- Global Configurator application
- IPL T SF Series hardware installation
- IPL T SF Series software configuration

IPL T SF Series Products

The Extron IPL T SF Series interface boxes can be installed as nodes on an Ethernet-based audio/video (A/V) network.

They can be used to remotely monitor and control connected A/V devices such as projectors, displays, VCRs, DVD players, and lighting systems, etc.



A typical IPL T SF Series Interface application

The IPL T SF Series products are shown on the following page.

IPL T SF24

The IPL T SF24 is a compact Ethernet control interface with

- a 12 VDC power supply
- an RJ-45 Ethernet receptacle
- two serial ports
- four flex I/O ports
- a high performance Web server
- IP Link® technology

IPL T SFI244

The IPL T SFI244 is a compact Ethernet control interface with

- a 12 VDC power supply
- an RJ-45 Ethernet receptacle
- two serial ports
- four flex I/O ports
- four IR ports
- a high performance Web server
- IP Link technology

Global Configurator

Global Configurator (GC) is a software application that gives users the ability to create a single configuration file of all of the devices on their audio/video (A/V) network.

There are two types of devices in an A/V system:

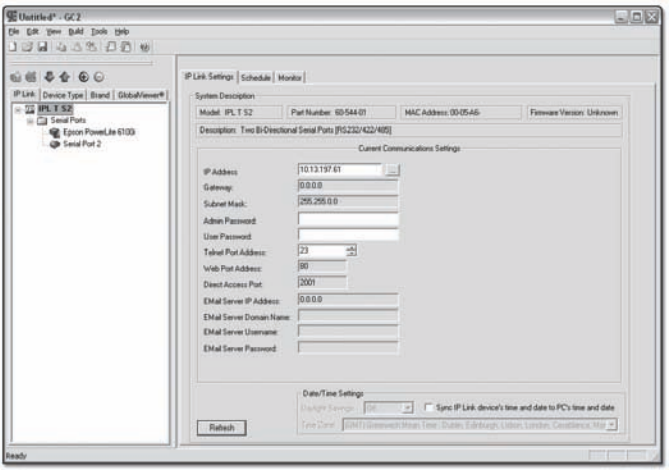
Controllers — Control devices that have an IP Link enabled Ethernet port for network connectivity, and serial, relay, I/O, and infrared (IR) ports for A/V device connectivity.

Controlled devices — A/V products, such as video projectors, displays, VCRs, DVD players, document cameras, projector screens, room lighting systems, etc; all of the equipment that is used to generate an audio/video presentation.

Once a "global" configuration file is built, GC then generates a graphical user interface called GlobalViewer® that allows users to monitor and control all of the A/V devices contained within the GC configuration file.

When the configuration file is created, one or more of the IP Link controllers on the network can be designated as a GlobalViewer host device.

The completed configuration file is uploaded to the host device(s). The GlobalViewer interface can then be launched by opening an Internet browser on a local PC and entering the host device's IP address in the browser's Address field.



Global Configurator application screen

Using GC you can configure a single room controller or create a web-based remote monitoring system for hundreds of A/V devices in multiple locations.

You may configure an IPL T SF Series interface using GC without having the device physically connected to the A/V network.

CAUTION *Use Global Configurator version 2.3 or later. Update all PCs and devices running earlier versions of GC.*

System requirements

The minimum system requirements for the PC on which you install Global Configurator include

- Intel® Pentium® III 1 GHz processor
- Microsoft® Windows® NT SP4, Windows 2000 SP2, or Windows XP SP2
- Microsoft Internet Explorer® 6.0 with ActiveX® enabled

NOTE *If ActiveX is not enabled, you may get a prompt from the browser, or you will see the "Please wait while the files are loading..." message in the GlobalViewer control page.*

- Microsoft Windows Script 5.6
- 512 MB of RAM
- 50 MB of available hard disk space
- A network connection with a minimum data transfer rate of 10 Mbps; however, 100 Mbps is recommended.

Installing Global Configurator

Global Configurator software is available free from Extron.

To download and install Global Configurator on your PC

1. Go to **www.extron.com.**
2. Click the **Download** tab.
3. Click the **IP Link® Software** icon.
4. Click the **Global Configurator** icon.
5. Click the **Download Now** button.
6. Complete the personal information form.
7. Click the **Download GCSWxxxxx.exe** button.
8. Follow the remaining system prompts.

To install Global Configurator from an Extron Software Products CD if Autorun is enabled on your PC:

1. Insert the Extron Software Products CD into your drive.
2. Wait for the Extron Software Products page to load.
3. Click on the **Software** icon.

4. Scroll down to the Global Configurator description and click the **Install** link in the far right column.
5. Follow the remaining system prompts.

To install Global Configurator from an Extron Software Products CD if Autorun is *not* enabled on your PC

1. Insert the Extron Software Products CD into your drive.
2. From the Windows desktop, open **My Computer** and select the **CD-ROM** drive.
3. Double click **launch.exe**.
4. Wait for the Extron Software Products page to load.
5. Click on the **Software** icon. 
6. Scroll down to the Global Configurator description and click the **Install** link in the far right column.
7. Follow the remaining system prompts.

Chapter Two

Hardware Setup

Front Panels

Rear Panels

Power Connection

Local Area Network (LAN) Connection

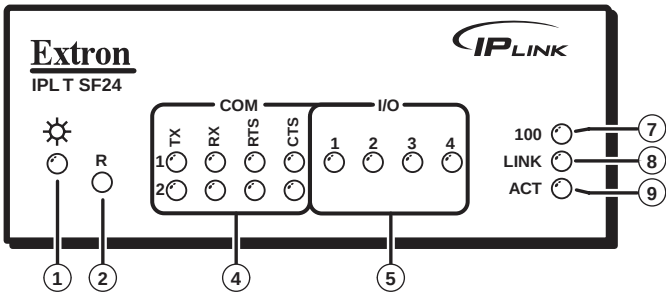
Serial Device Connection

Front Panels

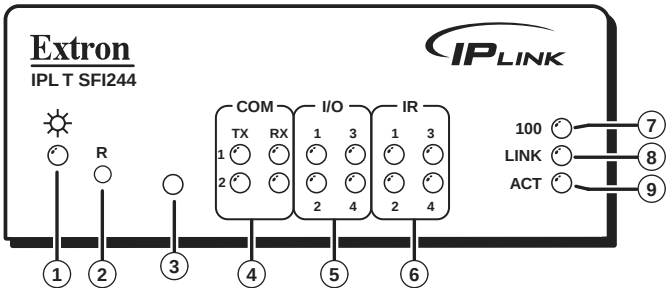
The front panels each have a recessed Reset button and the LED indicators described below.

1. **Power LED** — green when power is on
2. **Reset button** — a recessed multiple function reset button
3. **IR learning receiver** — This smaller infrared receiver "learns" commands from other devices' IR remote controls. See the IR Learner Software's help file for IR learning procedures.
4. **COM ports** — green LED indicates that data is being transmitted (TX), or received (RX), ready to send (RTS), or clear to send (CTS) on serial port 1 or 2.
5. **I/O ports** — green when an I/O port (1-4) is active
6. **IR ports** — green when an IR port (1-4) is transmitting data
7. **100 LED** — green when connection speed is 100 Mbps. Not lit when connection speed is 10 Mbps.
8. **Link LED** — green when connected to a network
9. **ACT LED** — yellow when LAN port is sending and receiving data

IPL T SF24 Front Panel



IPL T SFI244 Front Panel

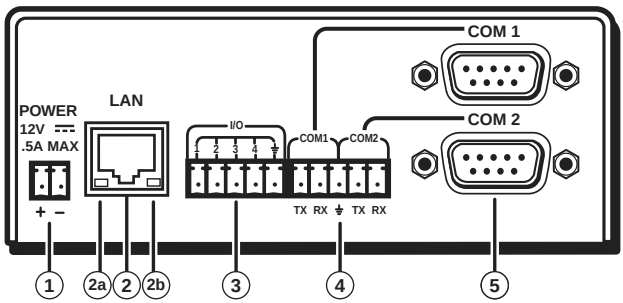


Rear Panels

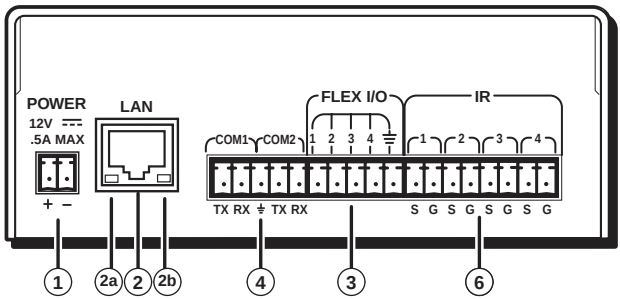
The rear panels have connectors for power, control, signal input, signal output, and indicators as described below.

1. **Power receptacle —** connects the supplied 12 VDC power supply
2. **LAN receptacle —** RJ-45 receptacle for network connection
2a. **LAN activity LED —** blinks yellow with LAN activity
2b. **LINK LED —** green with a network connection
3. **Flex I/O ports —** four serial input (for switches or sensors) or output ports (contact closure or relay outputs for power, screen, or projector lift control)
4. **COM ports —** 3.5 mm captive screw receptacles for serial ports COM1 and COM2
5. **COM ports —** 9-pin D connectors for serial ports COM1 and COM2
6. **IR ports —** 3.5 mm captive screw receptacles for infrared device connection

IPL T SF24 Rear Panel



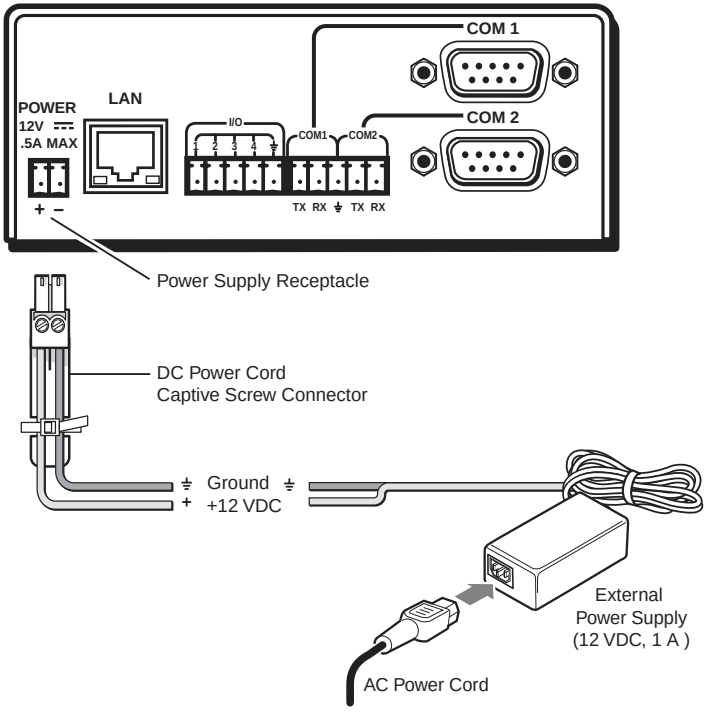
IPL T SFI244 Rear Panel



Power Connection

To connect the power supply:

1. Insert the DC power cord captive screw connector into the power supply receptacle on the rear panel of the interface box.

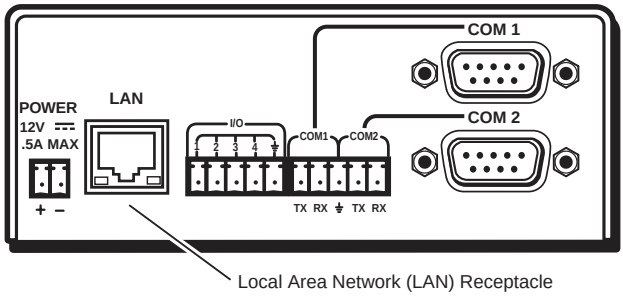


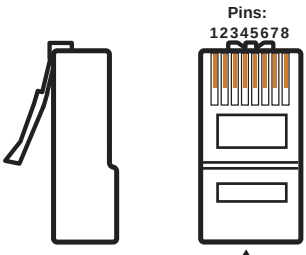
2. Connect the female end of the AC power cord into the power supply and the male end into a 110-220 VAC outlet.

Local Area Network (LAN) Connection

Connect a *patch (straight-through)* Ethernet cable to the LAN receptacle on the rear panel if you are connecting the interface to a switch, hub, or router on your A/V network.

Connect a *crossover* Ethernet cable to the LAN receptacle on the rear panel if you are connecting the interface directly to a PC.





RJ-45 Connector

Straight-through Cable
(for connection to a switch, hub, or router)

End 1		End 2	
Pin	Wire Color	Pin	Wire Color
1	white-orange	1	white-orange
2	orange	2	orange
3	white-green	3	white-green
4	blue	4	blue
5	white-blue	5	white-blue
6	green	6	green
7	white-brown	7	white-brown
8	brown	8	brown

Crossover Cable
(for direct connection to a PC)

End 1		End 2	
Pin	Wire Color	Pin	Wire Color
1	white-orange	1	white-green
2	orange	2	green
3	white-green	3	white-orange
4	blue	4	blue
5	white-blue	5	white-blue
6	green	6	orange
7	white-brown	7	white-brown
8	brown	8	brown

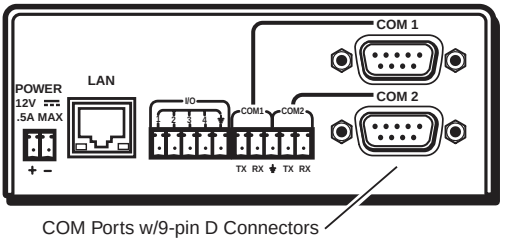
Serial Device Connection

There are two types of serial connections:

- 9-pin D connectors
- Captive screw connectors

9-pin D connectors

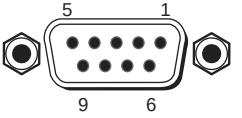
Connect any A/V device using a serial cable with a 9-pin D connector to either of the COM ports on the rear panel of an IPL T SF24 interface.



IPL T SF24

COM Ports w/9-pin D Connectors

Pinouts for the 9-pin D connectors are shown in the illustration and table below.



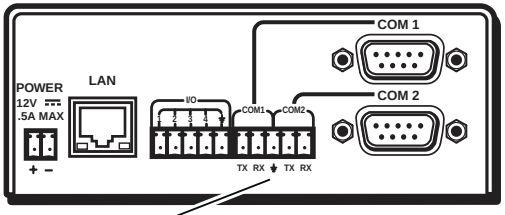
9-Pin D Connector Pinouts

Pin	Function	RS-232	RS-422	RS-485
2	Receive Data/Receive Data -	RX	RX-	Data - Tie 2 & 3
3	Transmit Data/Transmit Data -	TX	TX-	
5	Signal Ground	GND	GND	GND
7	Request to Send/Transmit Data +	RTS	TX+	Data + Tie 7 & 8
8	Clear to Send/Receive Data +	CTS	RX+	

NOTE *With RS-485 Data + can connect to pin 7 or 8. Data - can connect to pin 2 or 3.*

Captive screw connectors

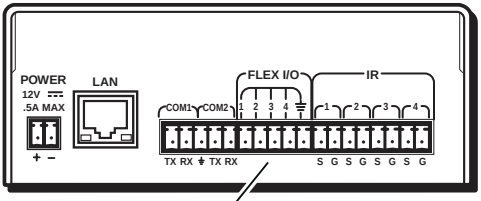
The IPL T SF24 has two COM ports with captive screw connectors that are common to the two 9-pin D connectors. Only one connector can be used for each COM port. If you use a COM port captive screw connector, its 9-pin D port is not accessible.



IPL T SF24

COM Ports
w/Captive Screw Connectors

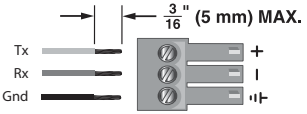
The IPL T SFI244 has two COM ports, four flex I/O ports, and four IR ports with captive screw connectors.



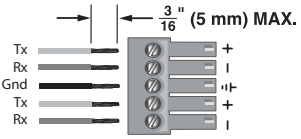
IPL T SFI244

COM, Flex, and IR Ports
w/Captive Screw Connectors

The captive screw connectors accept 2-pole, 3-pole, or 5-pole male captive screw connectors that are wired as shown in the illustrations below.



3-pole Captive Screw
Connector



5-pole Captive Screw
Connector

Chapter Three

Software Setup

Creating a Global Configurator Project File

Configuring a New Device

Building and Uploading a GC File

Launching the GlobalViewer® Interface

Creating a Global Configurator Project File

After you have installed the Global Configurator (GC) application on your PC, follow the steps in this chapter to download device drivers, create a GC project file, configure your IPL T SF Series devices, and launch the GlobalViewer® interface.

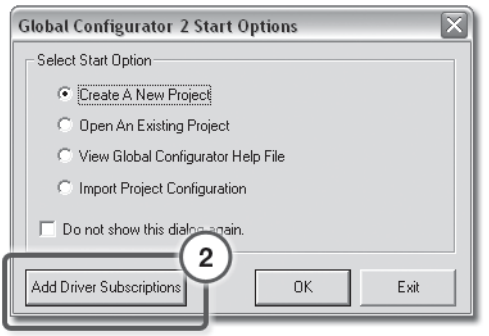
Step one: download device drivers

Software drivers for your audio/video devices are available free from the Extron Web site at www.extron.com.

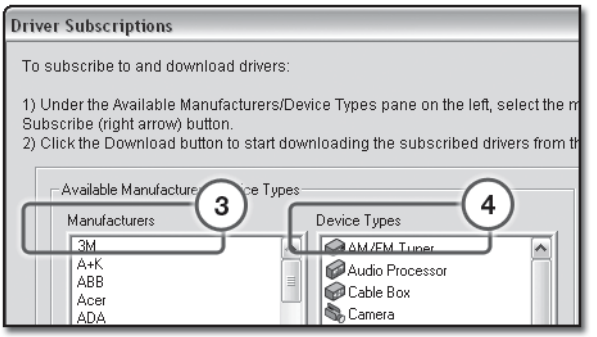
To download device drivers:

1. Click **Start > Programs > Extron Electronics > GC2.3.X** *or* double-click the **GC 2** icon on your desktop to launch the Global Configurator application.

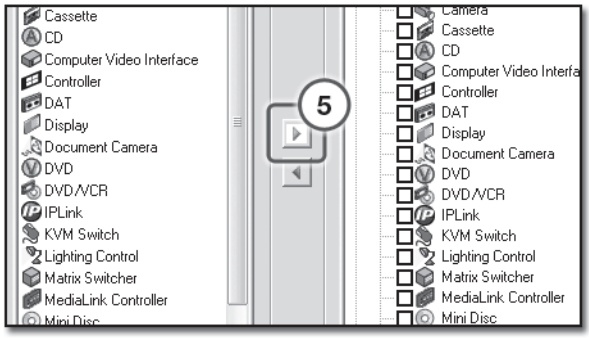
2. Click the **Add Driver Subscriptions** button.



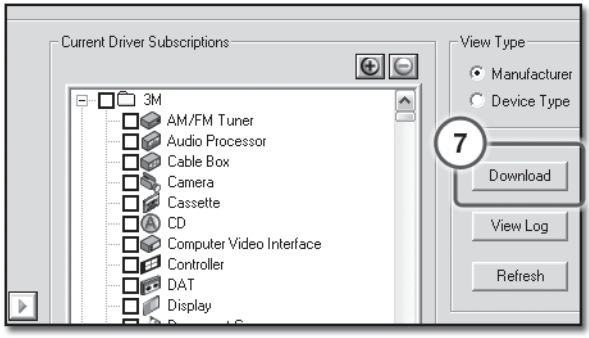
3. Select a manufacturer.
4. Select a device type.



5. Click the **Right Arrow (Subscribe)** button.

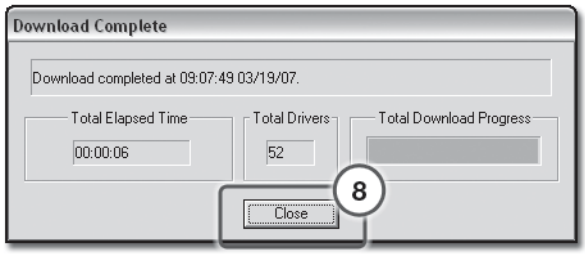


6. Repeat steps 3 through 5 for each type of device you plan to add to your audio/video network.
7. Click the **Download** button.



The **Download Complete** dialog box opens.

8. Click the **Close** button.

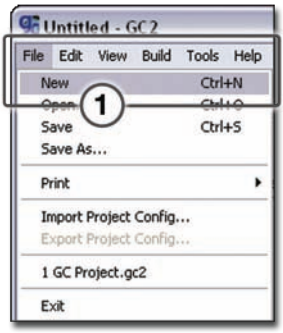


9. Click **OK**.

Step two: create a new project

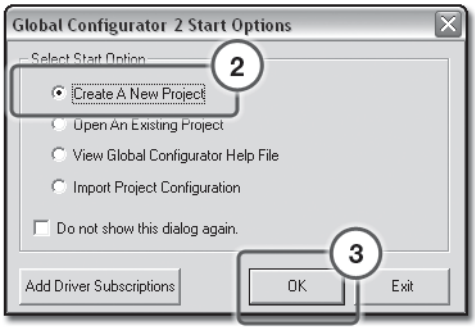
To create a new Global Configurator project file

1. Click **File > New**.



The Start Options dialog box opens.

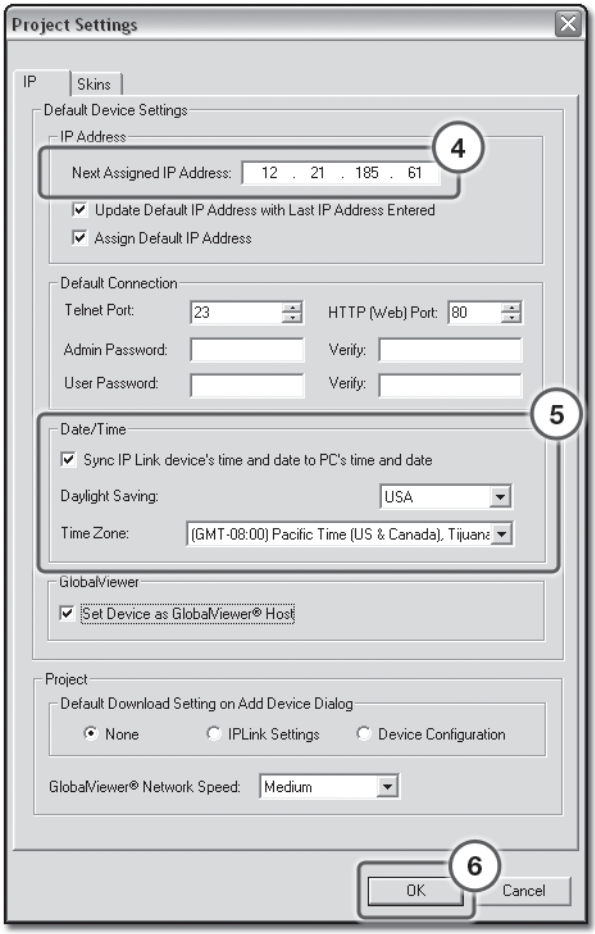
2. Select **Create a New Project.**
3. Click **OK**.



The Project Settings dialog box opens (see next page).

4. Enter the IP address of the first device you will add to your GC project file in the Next Assigned IP Address field.
5. Make the desired date/time selections.

6. Click **OK**. The Add Device dialog box opens.



Step three: add a device

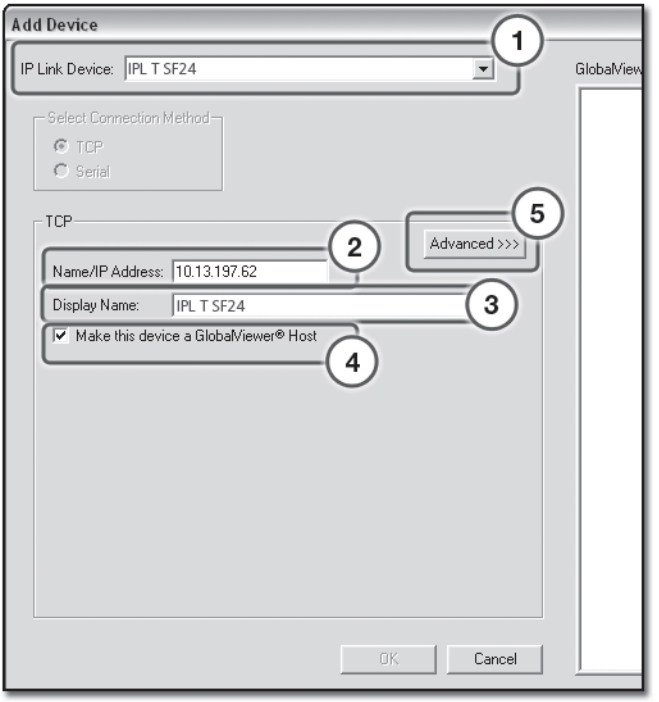
There are four ways to launch the Add Device dialog box

- Click **Ctrl+A**.
- Click **Edit > Add Device...**
- Click the **Add Device** icon.

When you select **Create a Project** in the Start Options dialog box and follow the prompts, the Add Device dialog is the second dialog box to open.

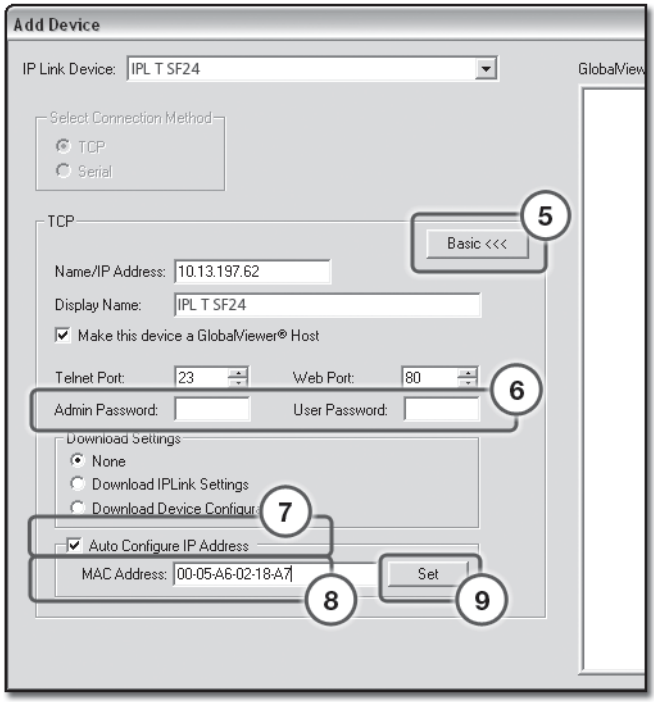
With the Add Device dialog box open:

1. Select an IPL T SF24 or IPL T SFI244 from the drop-down list.
2. Enter an IP address in the Name/IP Address field (or leave the default address).
3. Enter a unique display name.
4. Click **Make this device a GlobalViewer Host** (if desired).
5. Click the **Advanced** button. This opens additional Add Device screen options and changes the Advanced button to read Basic. (If you wish to return to the basic screen options, simply click the **Basic** button.)

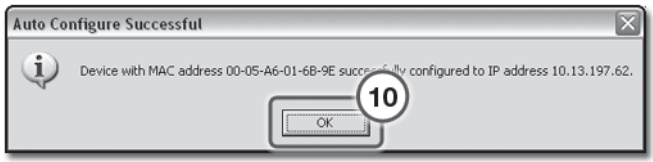


6. If the device you are adding is password protected, enter the appropriate Admin and User passwords. (The default condition is no Admin or User password).
7. Check **Auto Configure IP Address**.
8. Enter the device's MAC address (found on a label on the rear of the device).

9. Click **Set**. The Auto Configure Successful dialog box is displayed.



10. Click **OK**.



Step four: define the location of the new device

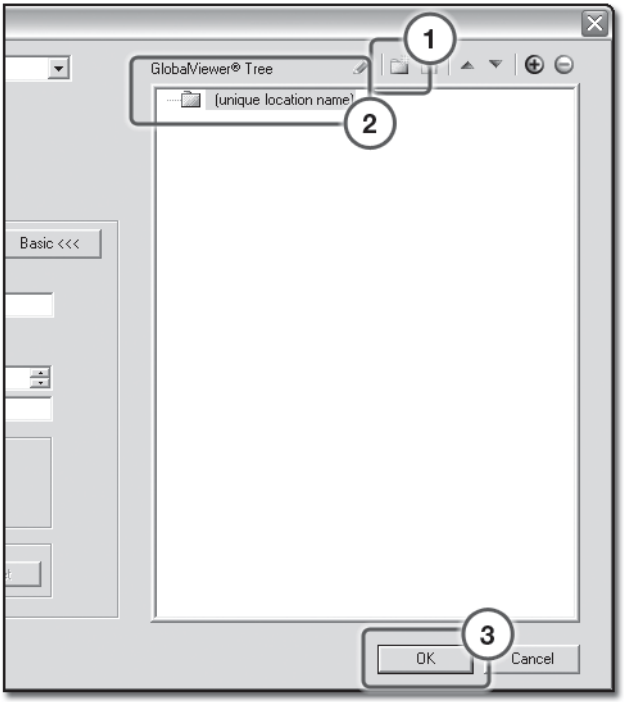
Global Configurator allows you to keep track of the devices on your A/V network by creating a custom tree of folders in which you can place and organize your A/V devices.

This GlobalViewer Tree can be up to eight levels deep and have multiple folders in each level.

To move your newly added device to a Location folder, with the Add Device dialog box still open

1. Click the **New Location** folder icon in the GlobalViewer Tree window.

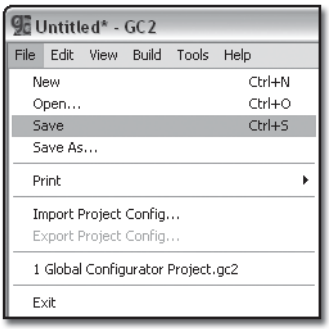
2. Enter a unique location name for the new folder and keep the new Location folder selected.
3. Click **OK**. The new device is added to the selected Location folder and the Add Device dialog box closes.



Step five: save the new Global Configurator file

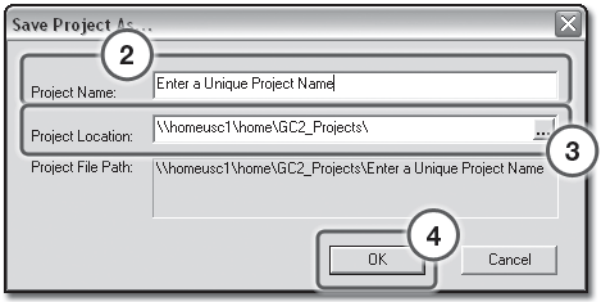
To save the new GC project file

1. Click **File > Save** *or* click the **Save** icon.



If the file has not previously been saved, the Save As dialog box opens.

2. Enter a unique name in the Project Name field.
3. Click the browse button to browse to the desired file location.
4. Click **OK**.



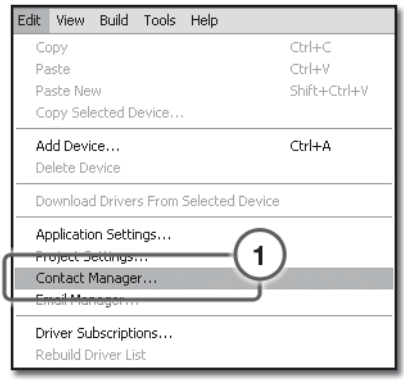
Configuring a New Device

Step six: configure contacts

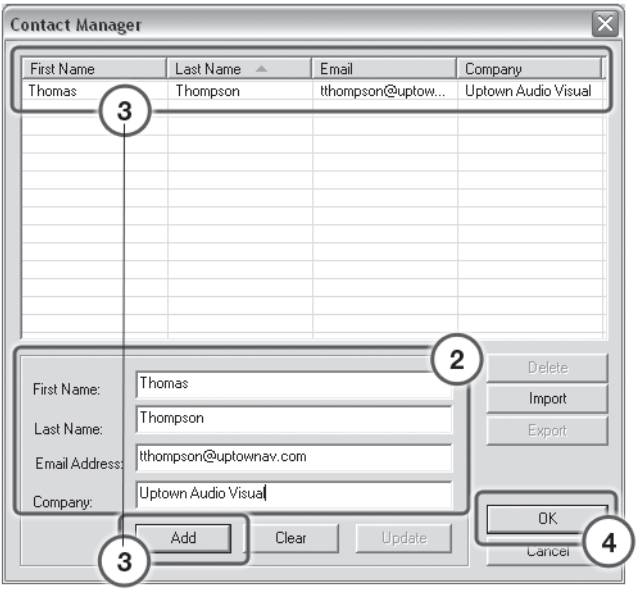
The Contact Manager dialog box is used to enter the name, e-mail address, and company name of the network's contacts.

To configure contacts:

1. Click **Edit > Contact Manager...**



2. Complete the Name, Email, and Company fields.
3. Click **Add**. The contact information is added.
4. Click **OK**.

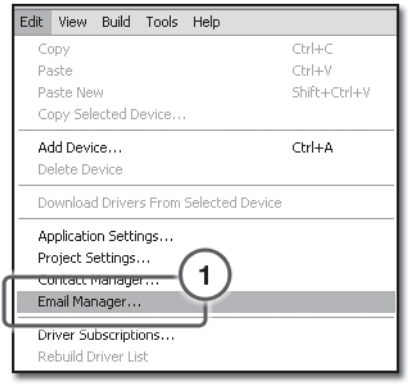


Step seven: configure e-mail

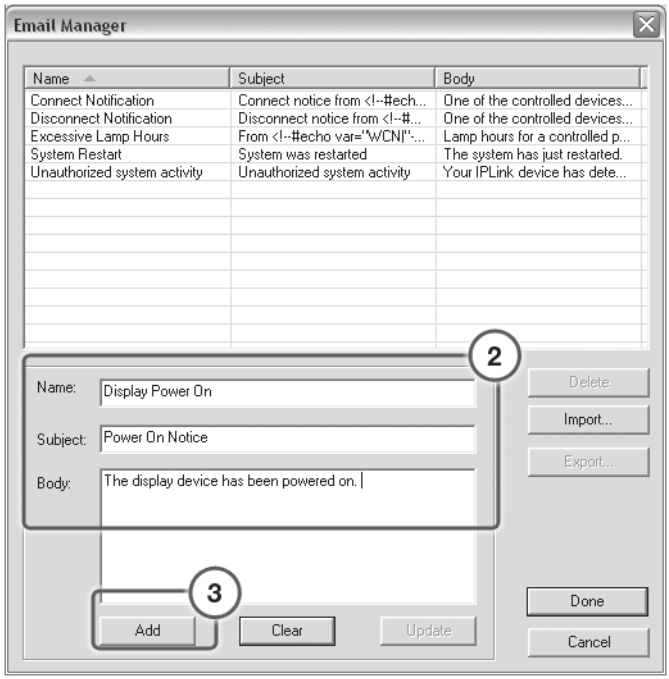
The Email Manager dialog box is used to create custom e-mails that are delivered as directed by the settings in the GC Schedule and Monitor dialog boxes.

To create custom e-mails

1. Click **Edit > Email Manager...**



2. Complete the Name, Subject, and Body fields.
3. Click **Add.**

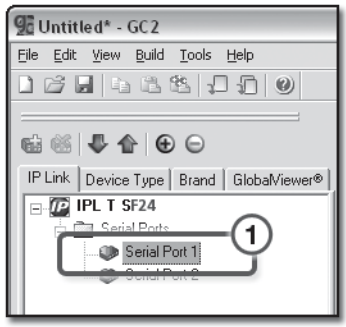


Step eight: assign device drivers

The Serial Configuration tab of Global Configurator allows you to assign a device driver to each serial port of the device.

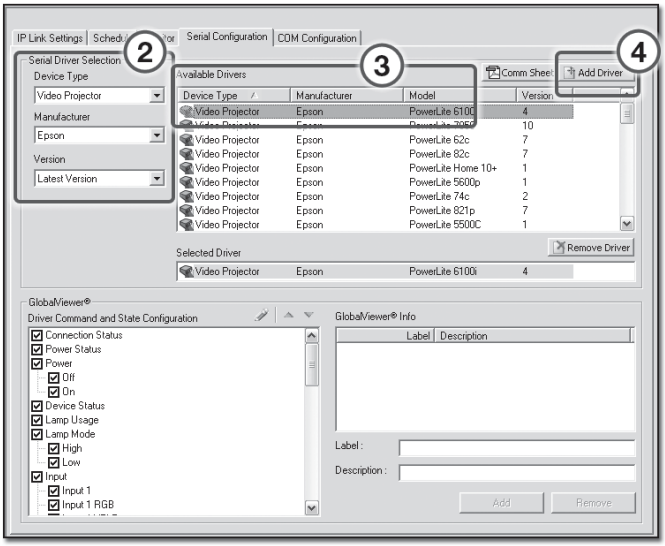
To assign a device driver

1. Select a serial port in the IP Link® Tree window.



The **Serial Configuration** tab opens.

2. Select a Device Type, Manufacturer, and Version filter.
3. Select an available driver.
4. Click **Add Driver.**



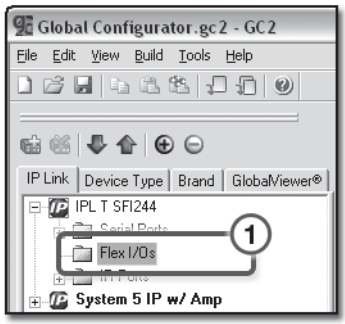
Step nine: set the input/output configuration

The I**nput/Output Configuration** tab is used for the Flex I/O ports which can be configured for

- Digital In
- Digital Out
- Analog In

To configure a Flex I/O port

1. Select a Flex I/O folder in the IP Link Tree window.
2. Select a Flex I/O Port in the Input/Output Configuration window.

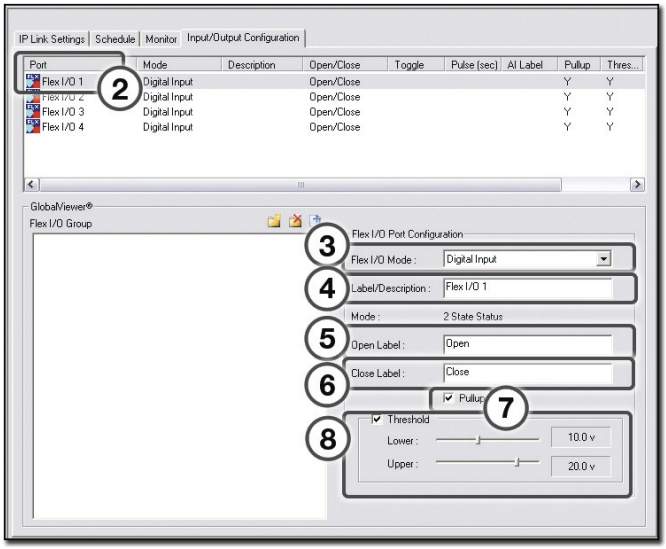


3. Select the desired Flex I/O mode. The Flex I/O port configuration options vary depending on which Flex I/O mode is chosen.

If the Flex I/O mode is **Digital Input**:

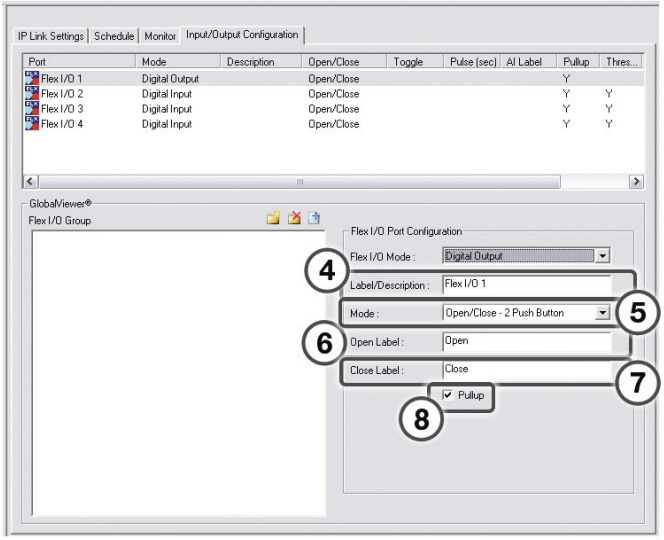
4 Enter a unique description.

5. Enter a unique open label.
6. Enter a unique close label.
7. Click the **Pullup** checkbox if desired.
8. Click the **Threshold** checkbox if desired and set the desired threshold limits.



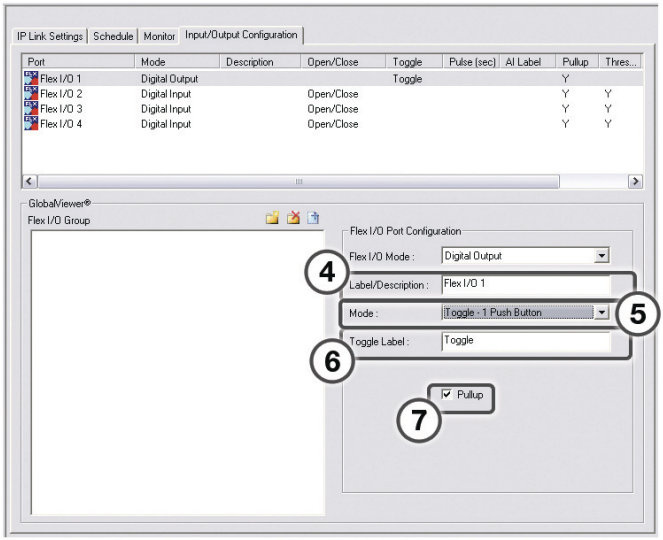
If the Flex I/O mode is **Digital Output** and the mode is **Open/Close - 2 Push Button**

4. Enter a unique description.
5. Select **Open/Close - 2 Push Button**.
6. Enter a unique open label.
7. Enter a unique close label.
8. Click the **Pullup** checkbox if desired.



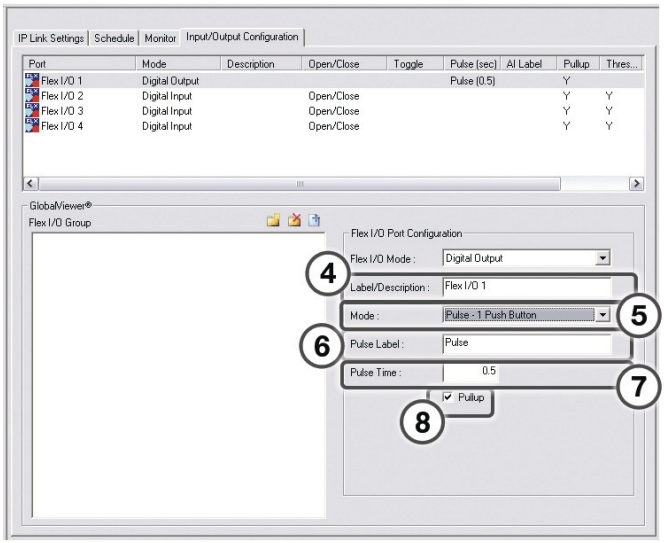
If the Flex I/O mode is **Digital Output** and the mode is **Toggle - 1 Push Button**

4. Enter a unique description.
5. Select **Toggle - 1 Push Button**.
6. Enter a unique toggle label.
7. Click the **Pullup** checkbox if desired.



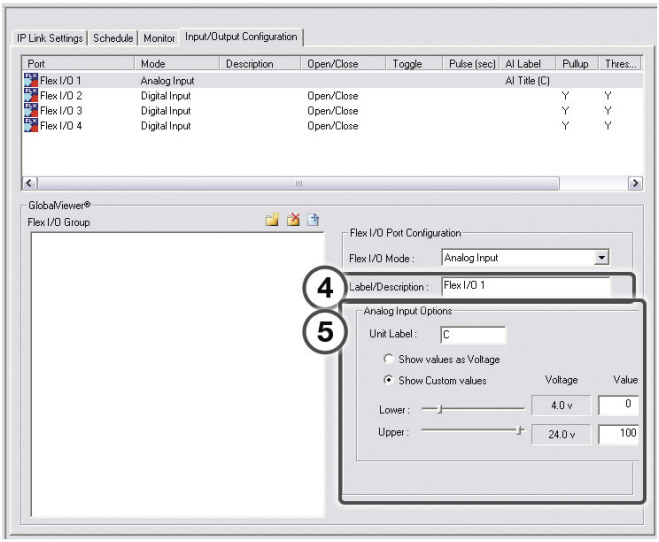
If the Flex I/O mode is **Digital Output** and the mode is **Pulse - 1 Push Button**

4. Enter a unique description.
5. Select **Pulse - 1 Push Button.**
6. Enter a unique pulse label.
7. Enter the desired pulse time.
8. Click the **Pullup** checkbox if desired.



If the Flex I/O mode is **Analog Input**

4. Enter a unique description.
5. Select the analog input options.
   - Unit Label — Identify the units (ex: "C" for degrees centigrade) that the following values will represent when displayed in the GlobalViewer interface.
   - Show Values as Voltage — If this radio button is selected, the analog voltage input value to the Flex I/O port is displayed in GlobalViewer and the Custom Value options (below it) will not be active.
   - Show Custom Values — If this radio button is selected, you can set a scale of relative values that will display the desired numeric values in the GlobalViewer interface.
   - Example: If you want an input of 4 volts to represent a temperature of 0° C, and an input of 24 volts to represent a temperature of 100°C
     - Enter "C" (for Centigrade) in the Unit Label field.
     - Set the Lower voltage slider at 4.0, and enter 0 in it's Value field.
     - Set the Upper voltage slider at 24.0, and enter 100 in it's Value field.

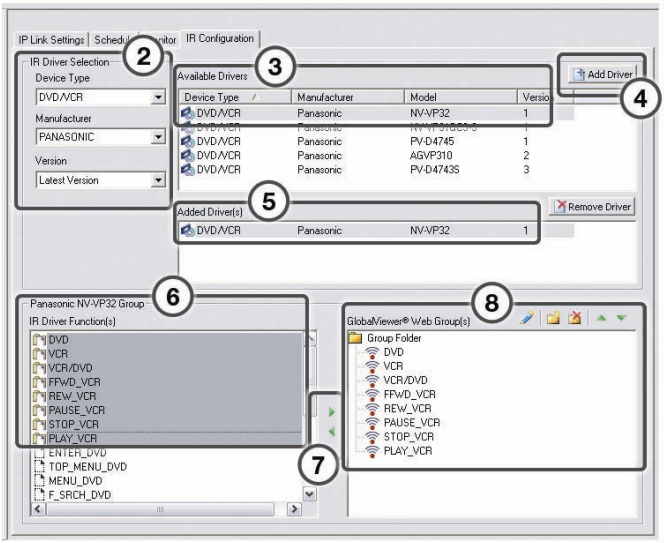


Step ten: set the IR configuration

The **IR Configuration** tab is used to configure the IR ports that are present on an IPL T SFI244 device only.

To configure an IPL T SFI244 IR port

1. Select an IR port in the IP Link Tree window.
2. Select a device type, manufacturer, and version in the IR Driver Selection area.
3. Select a device driver.
4. Click the **Add Driver** button.
5. Select the desired driver in Added Driver(s) field.
6. Select the desired functions in the IR Port X Group/IR Driver Function(s) field.
7. Click the green right arrow button to move the selected functions to the GlobalViewer Web Group(s) window (8). These are the functions that will be displayed and usable in the GlobalViewer interface.
8. If desired, rename the Group Folder with a unique name.

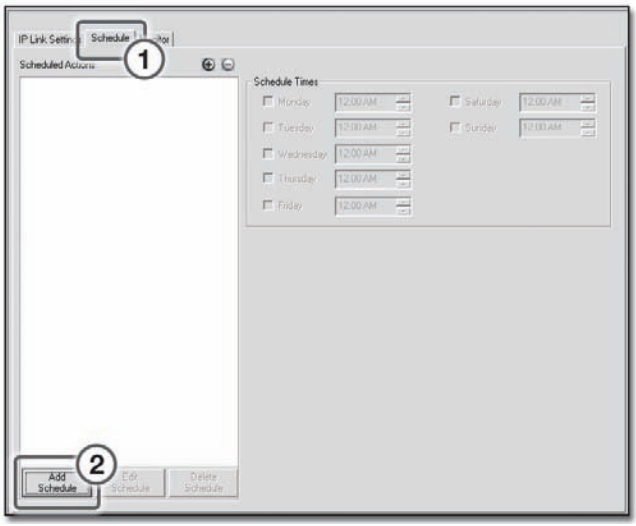


Step eleven: set scheduled actions and e-mail deliveries

The **Schedule** tab is used to set scheduled actions and e-mail deliveries. A single schedule can include both actions and e-mail assignments.

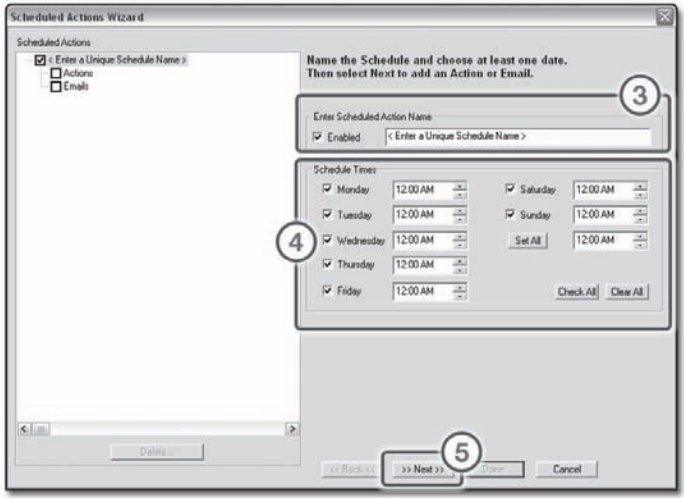
To schedule an action

1. Click the **Schedule** tab.
2. Click the **Add Schedule** button.

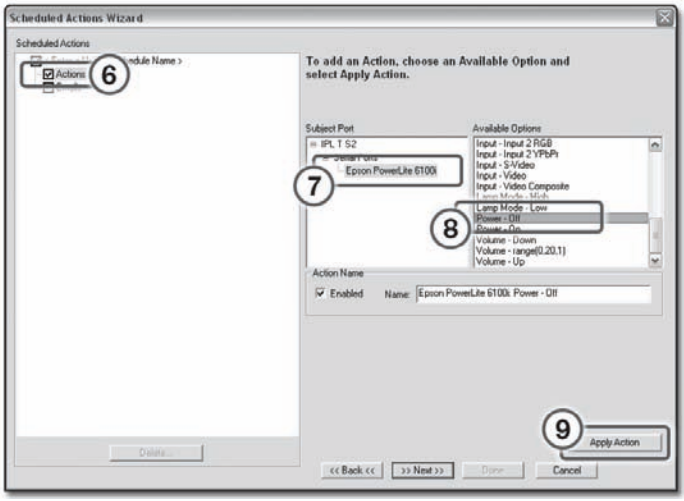


The Scheduled Actions Wizard dialog box opens.

3. Enter a unique schedule name.
4. Select the schedule times.
5. Click **Next**.

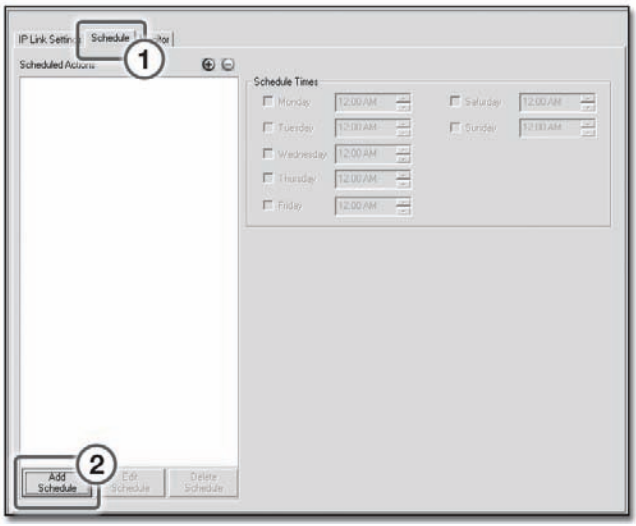


6. Click **Actions**.
7. Select a subject port (device).
8. Select an available option (action).
9. Click **Apply Action**.



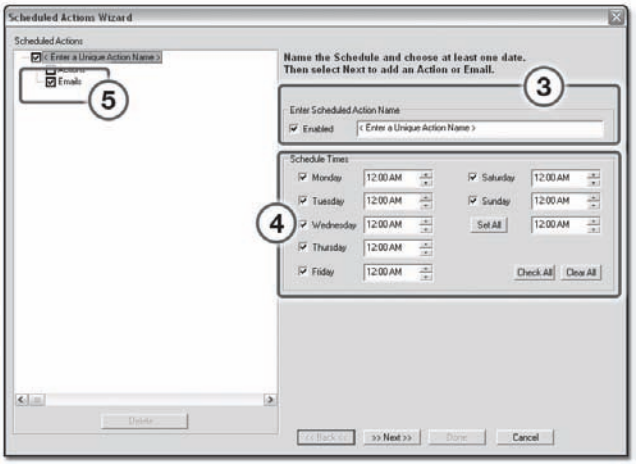
To schedule an e-mail delivery

1. Click the **Schedule** tab.
2. Click the **Add Schedule** button.



The Scheduled Actions Wizard dialog box opens.

3. Enter a unique scheduled action name.
4. Select the schedule times.
5. Click **Emails**.



The Add an Email window opens in the right pane.

6. Select an e-mail message.
7. Select a recipient (contact).

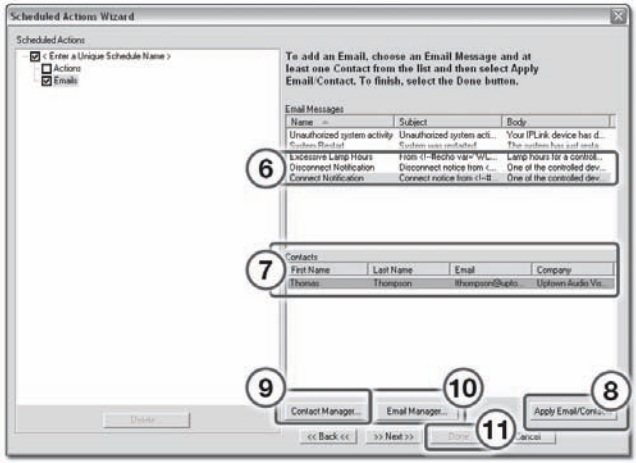
8. Click **Apply Email/Contacts**.

The new e-mail and recipient are now displayed in the left pane.

9. Use the **Contact Manager** button to create new contacts (if desired).

10. Use the **Email Manager** button to create new custom e-mails (if desired).

11. Click **Done**.



Step twelve: set monitored conditions

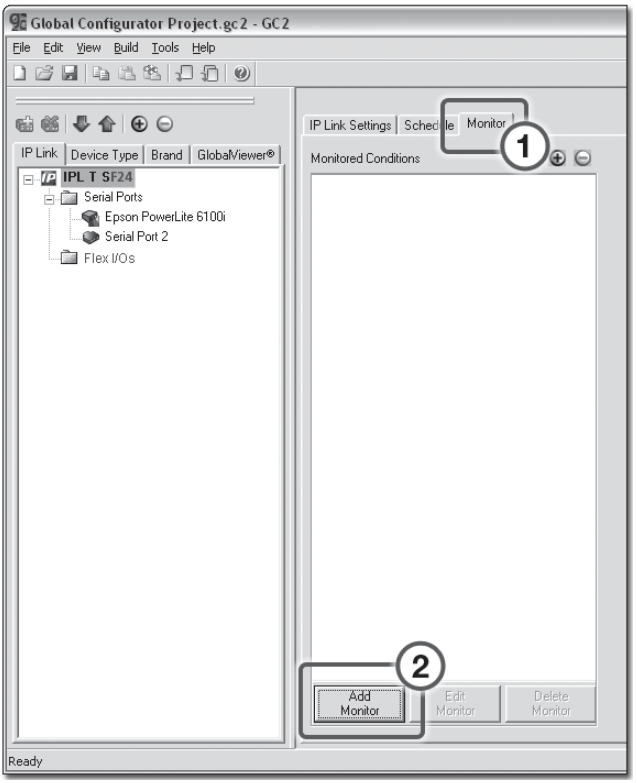
The **Monitor** tab is used to respond with an action or e-mail to a specified condition or event.

Actions vary by selected device, and include options such as Enable/Disable PINs, Lockout Front Panel, and Time Delay.

Custom e-mails can be created and sent to specified e-mail addresses following specified conditions or events.

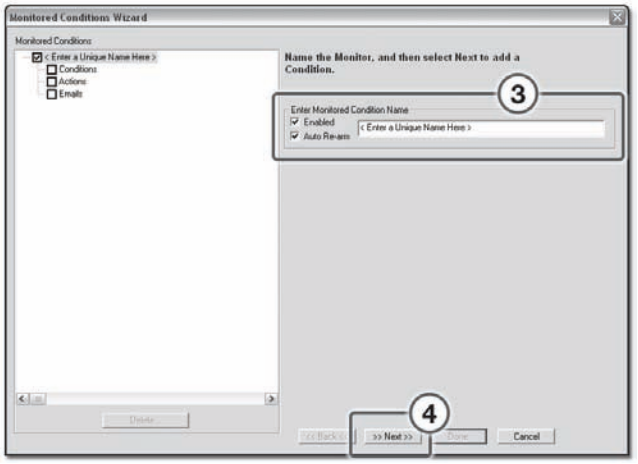
To add a monitored condition:

1. Click the **Monitor** tab.
2. Click the **Add Monitor** button.

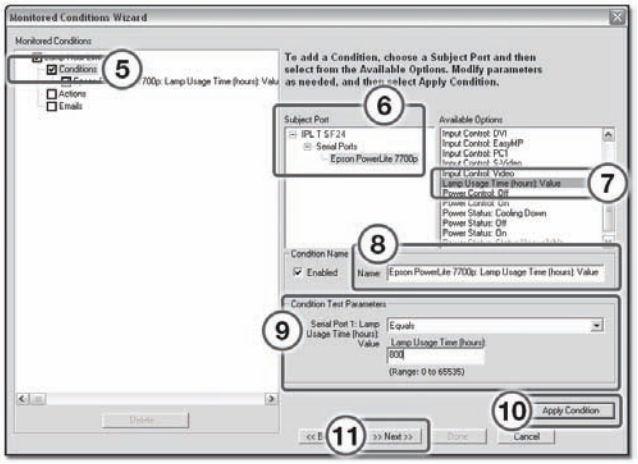


The Monitored Condition Wizard opens.

3. Enter a unique monitored condition name.
4. Click **Next**.

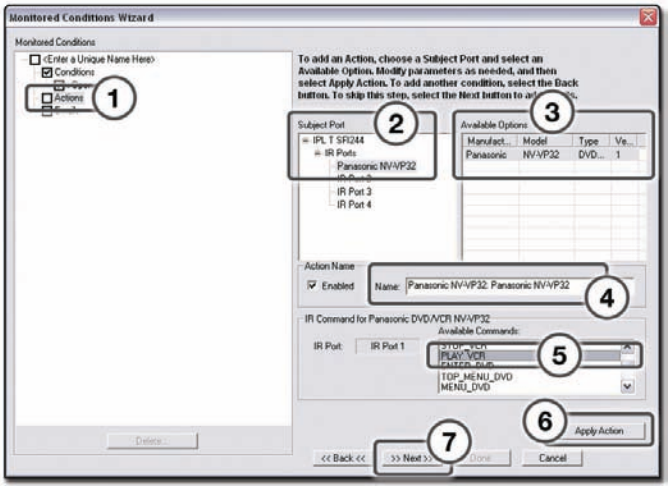


5. Select Conditions.
6. Select a Subject Port (device).
7. Select an available option.
8. Edit the Name field (if desired).
9. Set the desired condition test parameters (if available).
10. Click **Apply Condition**. A checkmark appears in the **Conditions** checkbox.
11. Click **Next**.



To add an action

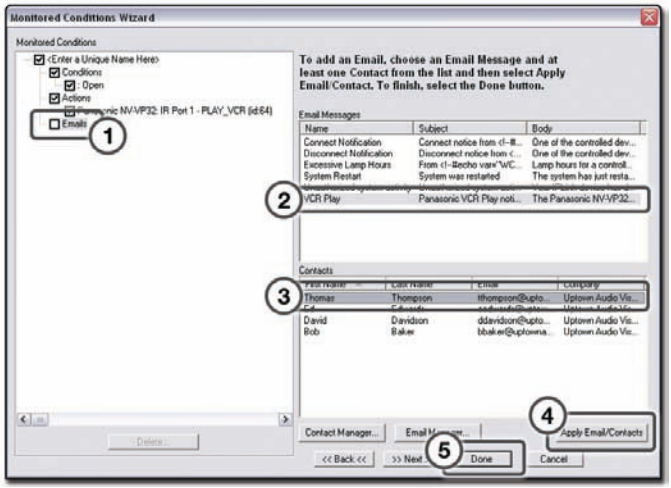
1. Select **Actions**.
2. Select a subject port (device).
3. Select an available option.
4. Edit the Name field if desired.
5. Select an available command.
6. Click **Apply Action.** A checkmark appears in the **Actions** checkbox.
7. Click **Next**.



To add an e-mail notification

1. Select **Emails**.
2. Select an e-mail message.
3. Select a contact.
4. Click **Apply Email/Contacts**. A checkmark appears in the **Emails** checkbox.

5. Click **Done**. The dialog box closes.



Building and Uploading a GC File

Before a Global Configuration (GC) file is active in the GlobalViewer interface, the GC file must be "built" and "uploaded" to a GlobalViewer host device.

The "build" process compiles all of the configuration data you have entered into the GC file for each A/V network device.

The "upload" process delivers the built (compiled) file to the GlobalViewer host device.

After the GC file has been uploaded to a host device, you can launch the GlobalViewer interface by entering the host device's IP address in the Address field of an Internet browser.

Step thirteen: build the Global Configurator file

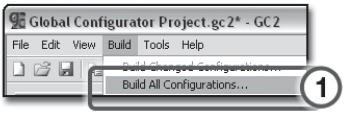
There are two Build commands:

Build All Configurations — compiles configuration data for all devices in the GC file, including data for devices previously uploaded to a GlobalViewer host device.

Build Changed Configurations — compiles configuration data only for devices that have been added or changed since the previous build cycle.

To initiate a "Build (all)" process

1. Click **Build > Build All Configurations...** *or* click the **Build All Configurations** icon.

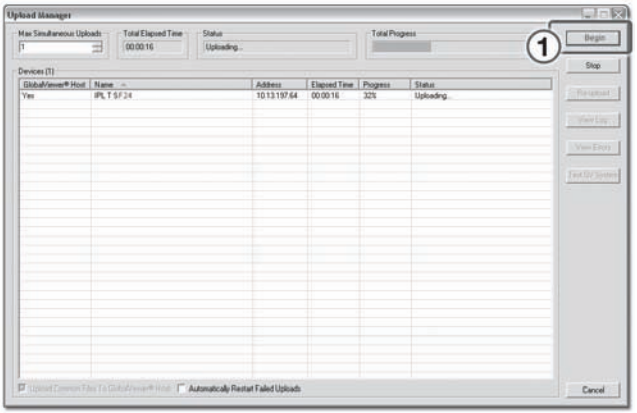


A Please Wait. Building Configuration(s)... dialog box opens and displays a progress bar while the GC file is being built.

Step fourteen: Upload the Global Configurator file

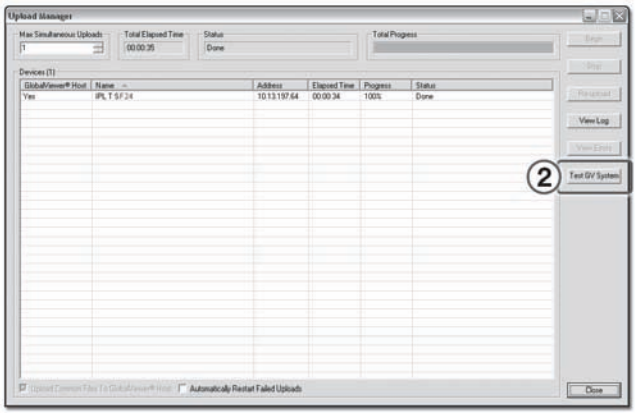
When the build process completes, the Upload dialog box opens.

1. Click the **Begin** button.



When the upload process completes, the Progress and Status fields are updated to indicate completion.

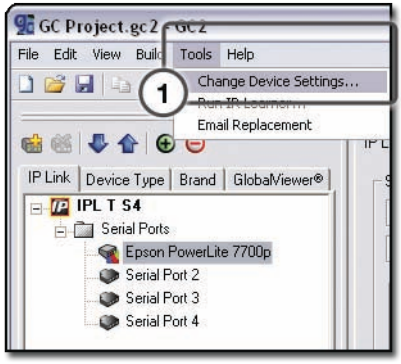
2. Click the **Test GV System** button to view the GlobalViewer host interface.



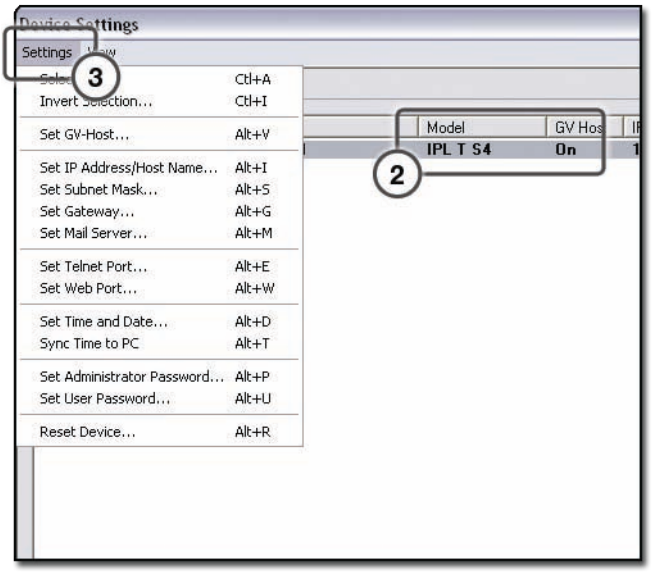
Step fifteen: change device settings (if desired)

If for any reason you need to change any of the previously configured settings:

1. Click **Tools > Change Device Settings**.



2. Select a device.
3. Click **Settings** to open the Settings drop-down listing.
3. Select and change the desired setting(s), for example: **Set Mail Server...**, **Set Gateway...**, **Set Subnet Mask...**, etc.



NOTE *Use* **Set Mail Server...** *in the drop-down listing to identify the local mail server's IP address, domain, and passwords.*

Launching the GlobalViewer Interface

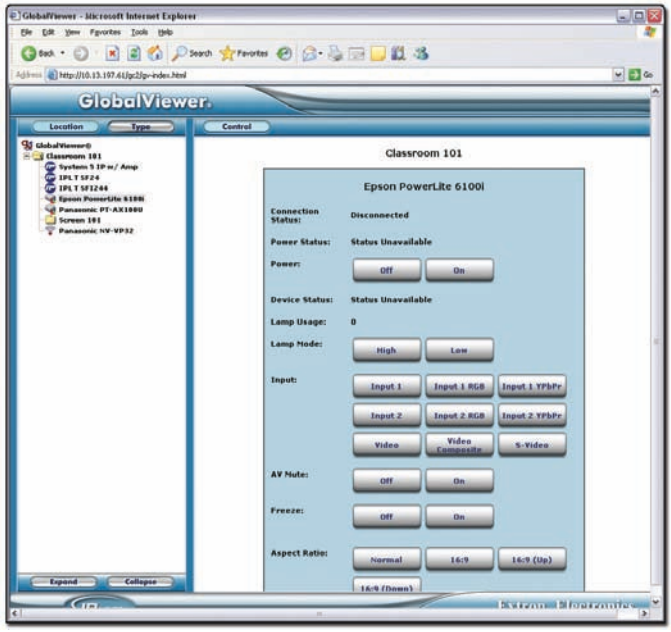
GlobalViewer is a graphical user interface that is generated by Global Configurator (GC). When a GC file is built and uploaded to a GlobalViewer host device, you can launch the GlobalViewer interface by opening an Internet browser and entering the host device's IP address in the browser's Address field.

Once the GlobalViewer interface is launched, you can monitor and control all of the devices on your A/V network from the GlobalViewer host device.

Step sixteen: launch GlobalViewer

To launch GlobalViewer:

1. Open an Internet browser.
2. Enter the IP address of a GlobalViewer host device in the Address field, and press the keyboard's **Enter** key.



Extron's Warranty

Extron Electronics warrants this product against defects in materials and workmanship for a period of three years from the date of purchase. In the event of malfunction during the warranty period attributable directly to faulty workmanship and/or materials, Extron Electronics will, at its option, repair or replace said products or components, to whatever extent it shall deem necessary to restore said product to proper operating condition, provided that it is returned within the warranty period, with proof of purchase and description of malfunction to:

USA, Canada, South America, and Central America:
Extron USA
1001 East Ball Road
Anaheim, CA 92805
U.S.A.

Europe, Africa, and the Middle East:
Extron Europe
Hanzeboulevard 10
3825 PH Amersfoort
The Netherlands

Asia:
Extron Asia
135 Joo Seng Road #04-01
PM Industrial Bldg.
Singapore 368363
Singapore

Japan:
Extron Japan
Kyodo Building, 16 Ichibancho
Chiyoda-ku, Tokyo 102-0082
Japan

China:
Extron China
686 Ronghua Road
Songjiang District
Shanghai 201611
China

Middle East:
Extron Middle East
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F12, PO Box 293666
United Arab Emirates, Dubai

This Limited Warranty does not apply if the fault has been caused by misuse, improper handling care, electrical or mechanical abuse, abnormal operating conditions or non-Extron authorized modification to the product.

If it has been determined that the product is defective, please call Extron and ask for an Applications Engineer at (714) 491-1500 (USA), 31.33.453.4040 (Europe), 65.6383.4400 (Asia), or 81.3.3511.7655 (Japan) to receive an RA# (Return Authorization number). This will begin the repair process as quickly as possible.

Units must be returned insured, with shipping charges prepaid. If not insured, you assume the risk of loss or damage during shipment. Returned units must include the serial number and a description of the problem, as well as the name of the person to contact in case there are any questions.

Extron Electronics makes no further warranties either expressed or implied with respect to the product and its quality, performance, merchantability, or fitness for any particular use. In no event will Extron Electronics be liable for direct, indirect, or consequential damages resulting from any defect in this product even if Extron Electronics has been advised of such damage.

Please note that laws vary from state to state and country to country, and that some provisions of this warranty may not apply to you.

Setup Guide Checklist

☐ **Chapter 1**: Install Global Configurator

- Download from www.extron.com, or
- Install from Extron Software Products CD

☐ **Chapter 2**: Make the IPL T SF cable connections.

1. ☐ Power

2. ☐ Local Area Network (LAN)

3. ☐ Serial devices

☐ **Chapter 3**: Create a Global Configurator (GC) project file. Add and configure a device. Build and upload the GC project file. Launch the GlobalViewer® interface.

1. ☐ Download device drivers.

2. ☐ Create a new Global Configurator project file.

3. ☐ Add a device.

4 ☐ Define the location of the new device.

5. ☐ Save the new Global Configurator file.

6. ☐ Configure Contacts.

7. ☐ Configure E-mail.

8. ☐ Assign Device Drivers.

9. ☐ Set the Input/Output Configuration.

10. ☐ Set the IR Configuration.

11. ☐ Set Scheduled Actions and E-mail Deliveries.

12. ☐ Set Monitored Conditions.

13. ☐ Build the Global Configurator file.

14. ☐ Upload the Global Configurator file.

15. ☐ Change device settings such as the e-mail server (if desired).

16. ☐ Launch GlobalViewer.

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